

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method comprising:

when a wireless/wired communications interface is detected as a communications interface type of a device, detecting a connection state of the device as one of a wireless connection state and a wired connection state;

when the wireless connection state is detected, determining a data transmission error rate of the device during operation of the device in a wireless communications mode;

~~when a device communications mode state indicates a communications mode of the device is a wired communications mode, determining the data transmission error rate of the device by querying a data transmission error rate state; and~~

notifying a device user to couple a wire link between the device and a host device to switch the device from the wireless communications mode to a wired communications mode when the data transmission error rate of the device exceeds a pre-determined threshold;

monitoring detected interference levels that increased the data transmission error rate to determine if the detected interference levels have subsided during operation in the wired communications mode; and

notifying the device user to disconnect the wire link when the detected interference levels have fallen within an accepted threshold level to resume the wireless communication mode.

2. (Previously Presented) The method of claim 1, wherein prior to detecting the connection state of the device, the method further comprises:

determining a communications interface type of the device;

setting a device communications interface state according to the determined communications interface type;

when a wireless/wired communications interface is detected as the communications interface type, determining whether a wire link is coupled to the device;

setting a wired connection state according to the determined wired connection;

when a wire link is coupled to the device, selecting a communications mode as one of a wireless communications mode and a wired communications mode according to the device

communications configuration state, the wired connection state and a radio frequency interference level; and

setting a device communications mode state according to the selected communications mode.

3. (Original) The method of claim 2, wherein selecting the communications mode further comprises:

when the device communications interface state indicates a wireless/wired communications interface and the wired connection state indicates presence of a wire link, determining a radio frequency interference level; and

when the radio frequency interference level exceeds a pre-determined interference level, setting the communications mode to the wired communications mode.

4. (Previously Presented) The method of claim 1, wherein prior to detecting the connection state of the device the method further comprises:

querying a device communications configuration state to detect the communications interface type of the device; and

when the communications interface type of the device is a wireless/wired communications interface, querying a wired connection state to determine whether a wire link couples the device to a host device.

5. (Cancelled)

6. (Previously Presented) The method of claim 1, wherein notifying the device user further comprises:

comparing the determined data transmission error rate to a pre-determined threshold error rate;

when the data transmission error rate exceeds the pre-determined threshold error rate, setting the device communications mode state to the wired communications mode;

initiating communication of the device via a wire link;

otherwise, setting the device communications mode to a wireless communications mode; and

initiating communication of the device via a wireless link.

7. (Previously Presented) The method of claim 1, wherein notifying the device user further comprises:

comparing the transmission error rate with a pre-determined threshold error rate;
when the transmission error rate exceeds the pre-determined threshold error rate,
querying a wired connection state to determine presence of a wire link coupled to the device;
when a wired connection is coupled to the device, switching the device from the wireless communications mode to the wired communications mode;
otherwise, notifying a device user to couple a wire link between the device and a host device; and

once the user couples a wire link between the device and the host device, switching the device from the wireless communications mode to the wired communications mode.

8. (Original) The method of claim 7, further comprising:

comparing the transmission error rate with a pre-determined threshold error rate;
when the transmission error rate is below the pre-determined threshold error rate,
notifying the user to disconnect the wire link between the device and the host device; and
once the user disconnects a wire link between the device and the host device, switching the device from the wired communications mode to the wireless communications mode.

9. (Previously Presented) The method of claim 1, wherein notifying the device user further comprises:

transmitting data, via a wire link, between the device and a host device, utilizing the wired communication mode; and
receiving data, via the wire link, from the host device, utilizing the wired communications mode.

10. (Original) The method of claim 1, wherein switching the device further comprises switching a host device, coupled to the device via a wire link, from the wireless communications mode to the wired communications mode.

11. (Currently Amended) A computer readable storage medium including program instructions that direct a computer to function in a specified manner when executed by a processor, the program instructions comprising:

when a wireless/wired communications interface is detected as a communications interface type of a device, detecting a connection state of the device as one of a wireless connection state and a wired connection state;

when the wireless connection state is detected, determining a data transmission error rate of the device during operation of the device in a wireless communications mode;

~~when a device communications mode state indicates a communications mode of the device is a wired communications mode, determining the data transmission error rate of the device by querying a data transmission error rate state; and~~

notifying a device user to couple a wire link between the device and a host device to switch the device from the wireless communications mode to a wired communication mode when the data transmission error rate of the device exceeds a pre-determined threshold;

monitoring detected interference levels that increased the data transmission error rate to determine if the detected interference levels have subsided during operation in the wired communications mode; and

notifying the user to disconnect the wire link when the detected interference levels have fallen within an accepted threshold level to resume the wireless communication mode.

12. (Previously Presented) The computer readable storage medium of claim 11, wherein prior to detecting the connection state of the device, the method further comprises:

determining a communications interface type of the device;

setting a device communications interface state according to the determined communications interface type;

when a wireless/wired communications interface is detected as the communications interface type, determining whether a wire link is coupled to the device;

setting a wired connection state according to the determined wired connection;

when a wire link is coupled to the device, selecting a communications mode as one of a wireless communications mode and a wired communications mode according to the device communications configuration state, the wired connection state and a radio frequency interference level; and

setting a device communications mode state according to the selected communications mode.

13. (Original) The computer readable storage medium of claim 12, wherein selecting the communications mode further comprises:

when the device communications interface state indicates a wireless/wired communications interface and the wired connection state indicates presence of a wire link, determining a radio frequency interference level; and

when the radio frequency interference level exceeds a pre-determined interference level, setting the communications mode to the wired communications mode.

14. (Previously Presented) The computer readable storage medium of claim 11, wherein prior to detecting the connection state of the device the method further comprises:

querying a device communications configuration state to detect the communications interface type of the device; and

when the communications interface type of the device is a wireless/wired communications interface, querying a wired connection state to determine whether a wire link couples the device to a host device.

15. (Cancelled)

16. (Previously Presented) The computer readable storage medium of claim 11, wherein notifying the device user further comprises:

comparing the determined data transmission error rate to a pre-determined threshold error rate;

when the data transmission error rate exceeds the pre-determined threshold error rate, setting the device communications mode state to the wired communications mode;

initiating communication of the device via a wire link;

otherwise, setting the device communications mode to a wireless communications mode; and

initiating communication of the device via a wireless link.

17. (Previously Presented) The computer readable storage medium of claim 11, wherein notifying the device user further comprises:

comparing the transmission error rate with a pre-determined threshold error rate;

when the transmission error rate exceeds the pre-determined threshold error rate,

querying a wired connection state to determine presence of a wire link coupled to the device;

when a wired connection is coupled to the device, switching the device from the wireless communications mode to the wired communications mode;

otherwise, notifying a device user to couple a wire link between the device and a host device; and

once the user couples a wire link between the device and the host device, switching the device from the wireless communications mode to the wired communications mode.

18. (Original) The computer readable storage medium of claim 17, further comprising:

comparing the transmission error rate with a pre-determined threshold error rate;

when the transmission error rate is below the pre-determined threshold error rate, notifying the user to disconnect the wire link between the device and the host device; and

once the user disconnects a wire link between the device and the host device, switching the device from the wired communications mode to the wireless communications mode.

19. (Previously Presented) The computer readable storage medium of claim 11, wherein notifying the device user further comprises:

transmitting data, via a wire link, between the device and a host device, utilizing the wired communication mode; and

receiving data, via the wire link, from the host device, utilizing the wired communications mode.

20. (Previously Presented) The computer readable storage medium of claim 11, wherein notifying the device user further comprises switching a host device, coupled to the device via a wire link, from the wireless communications mode to the wired communications mode.

21. (Currently Amended) An apparatus, comprising:

a processor having circuitry to execute instructions;
a communications interface coupled to the processor, the communications interface to transmit data to a host device, and to receive data from the host device;
a connection port coupled to the processor to enable coupling of the apparatus to the host device via a wire link;
a wired/wireless detection unit to detect whether the apparatus is coupled to the host device via the wired link as one of a wired connection state and a wireless connection state; and
a storage device coupled to the processor, having sequences of instructions stored therein, which when executed by the processor cause the processor to:

determine a data transmission error rate of the apparatus during operation of the apparatus in a wireless communications mode if the wireless connection state is detected by the wired/wireless detection unit,

~~notifying~~ notify a device user to couple the wire link between the apparatus and the host device to switch the apparatus from the wireless communications mode to a wired communications mode when the data transmission error rate of the apparatus exceeds a pre-determined threshold error rate,

~~when the transmission error rate is below the pre-determined threshold error rate, monitor detected interference levels that increased the data transmission error rate to determine if the detected interference levels have subsided during operation in the wired communications mode,~~

~~notify the user to disconnect the wire link between the apparatus and the host device when the detected interference levels have fallen within an accepted threshold level;~~ and

once the user disconnects the wire link between the apparatus and the host device, switch the device from the wired communications mode to the wireless communications mode.

22. (Original) The apparatus of claim 21, wherein the instruction to switch the apparatus from the wireless communications mode to the wired communications mode further causes the processor to:

compare the transmission error rate with a pre-determined threshold error rate;

when the transmission error rate exceeds the pre-determined threshold error rate, query the wired/wireless detection unit to determine presence of a wire link coupled to the apparatus connection port;

when the wired link is coupled to the apparatus connection port, switch the apparatus from the wireless communications mode to the wired communications mode;

otherwise, notify an apparatus user to couple the wire link between the apparatus and the host device; and

once the user couples the wire link between the apparatus and the host device, switch the apparatus from the wireless communications mode to the wired communications mode.

23. (Cancelled)

24. (Currently Amended) A system comprising:

a host device;

a wireless/wired communication device including:

a communications interface, the communications interface to transmit data to the host device, and to receive data from the host device via a wire link during a wired communications mode and a wireless link during a wireless communications mode,

a connection port coupled to the communications interface to enable coupling of the communication device to the host device via the wire link,

a wired/wireless detection logic coupled to the communications interface to detect whether the communication device is coupled to the host device via the wire link as one of a wired connection state and a wireless connection state,

a user interface coupled to the communications interface to notify a device user to couple the wire link between the communication device and the host device to enable the communications interface to switch from the wireless communications mode to the wired communications mode when the data transmission error rate of the communication device exceeds a pre-determined threshold if the wireless connection state is detected by the wired/wireless detection unit, and

wherein the host device is to monitor detected interference levels that increased the data transmission error rate to determine if the detected interference levels have subsided during operation in the wired communications mode, the user interface is further to notify the user to disconnect the wire link between the communication device and the host device ~~when the transmission error rate is below the pre-determined threshold error rate when the detected~~

interference levels have fallen within an accepted threshold level, and once the user disconnects a wire link between the device and the host device, to switch the device from the wired communications mode to the wireless communications mode.

25. (Original) The system of claim 24, wherein the host device comprises:

a host communications interface, the host communications interface to transmit data to the communications device, and to receive data from the communications device via the wire link during the wired communications mode and the wireless link during the wireless communications mode; and

a host connection port coupled to the host communications interface to enable coupling of the host device to the communications device via the wire link.

26. (Cancelled)